

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Amended) A computer-implemented method for modeling cost, comprising the steps of:

receiving sales data, cleaning the sales data and generating imputed variables, wherein said imputed variables are generated by making at least one posterior inference to impute missing data when at least one data point is missing;

receiving cost data; and

estimating cost per unit of product from the sales data, the imputed variables and the cost data.

2. (Previously Amended) The computer-implemented method, as recited in claim 1, wherein the determining the cost per unit of product comprises estimating inventory space in the store used by the product, which is estimated from sales data indicating volume of sales of the product and cost data indicating the frequency of product delivery.

3. (Previously Amended) An apparatus for modeling costs, useful in association with an optimization engine, wherein the optimization engine is configured to receive input from the apparatus, and wherein the optimization engine is further configured to generate a preferred set of prices, the apparatus comprising:

an econometric engine for receiving sales data, cleaning the sales data and generating imputed variables, wherein said imputed variables are generated by making at least one posterior inference to impute missing data when at least one data point is missing; and

a financial engine for receiving imputed variables from the econometric engine, receiving cost data, generating a cost model, and outputting the cost model to the optimization engine.

4. (Original) The apparatus, as recited in claim 3, wherein the financial engine estimates inventory space in a store used by a product from the sales data and delivery data.
5. (Previously Added) The computer-implemented method, as recited in claim 1, wherein the imputed variables include at least one of a seasonality variable, a promotional variable and a cross-elasticity variable.
6. (Previously Added) The apparatus, as recited in claim 3, wherein the imputed variables include at least one of a seasonality variable, a promotional variable and a cross-elasticity variable.
7. (New) The computer-implemented method, as recited in claim 5, wherein said estimating cost per unit of product step includes estimating fixed costs and estimating variable costs, further wherein said variable costs are a function of the amount of sales of said product and said fixed costs are not a function of the amount of sales of said product.
8. (New) The computer-implemented method, as recited in claim 7, wherein said estimated costs are estimated on an individual store level.

9. (New) The computer-implemented method, as recited in claim 8, wherein said estimated cost per unit of product is determined as a cost for said product in said individual store for a selected demand group in a selected time period, further wherein said demand group is a group of highly substitutable products.

10. (New) The computer-implemented method, as recited in claim 9, wherein said estimated cost per unit of product in said store is determined as the sum of a bag cost, a location inventory cost, a checkout labor cost, a location receiving cost, a transportation cost, a distribution center inventory cost, a distribution center labor cost, an invoice processing cost, a location space cost, and a distribution center space cost.

11. (New) The apparatus, as recited in claim 6, wherein said cost model includes fixed costs and variable costs, further wherein said variable costs are a function of the amount of sales of said product and said fixed costs are not a function of the amount of sales of said product.

12. (New) The apparatus, as recited in claim 11, wherein said cost model models costs on an individual store level.

13. (New) The apparatus, as recited in claim 12, wherein said cost model models costs for individual products in said individual store for a selected demand group in a selected time period, further wherein said demand group is a group of highly substitutable products.

14. (New) The apparatus, as recited in claim 13, wherein said cost model models costs as the sum of a bag cost, a location inventory cost, a checkout labor cost, a location receiving cost, a transportation cost, a distribution center inventory cost, a distribution center labor cost, an invoice processing cost, a location space cost, and distribution center space cost.